

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in this application.

The following amendments do not constitute an admission regarding the patentability of the amended subject matter and should not be so construed. Applicants reserve the right to pursue the subject matter of the canceled claims in this or any other appropriate patent application. Please cancel claim 4 without prejudice to or disclaimer of the subject matter contained therein.

**Listing of Claims:**

1. (Cancelled)
2. (Cancelled)
3. (Currently Amended) A method for graphically interfacing between a computer system and a user, wherein the computer system interactively displays objects representative of chemical compounds, wherein distances between the objects represent dissimilarity between the corresponding chemical compounds, comprising:
  - (1) receiving a user selected list of chemical compounds;
  - (2) displaying objects representative of the user-selected chemical compounds in a window of a display screen, wherein distances between the objects represent dissimilarity between the corresponding chemical compounds;
  - (3) receiving user input relating to one or more of the following:
    - (i) deleting one or more of the objects from the window;
    - (ii) adding one or more additional objects to the window;
    - (iii) displaying chemical compound information associated with one or more of the objects;
    - (iv) selecting between having the computer system evaluate the dissimilarities or retrieve dissimilarity values from a source;

- (v) selecting one or more dissimilarity evaluation techniques;
- (vi) selecting one or more properties to be evaluated as part of a dissimilarity evaluation;
- (vii) selecting a scaling factor for one or more of the properties.

4. (Cancelled)

5. (Previously presented) The method according to claim 3, further comprising:

(4) repeating steps (1) through (3) for a second user-selected list of chemical compounds, wherein objects representative of the second user-selected chemical compounds are displayed in the window.

6. (Previously presented) The method according to claim 3, further comprising:

(4) repeating steps (1) through (3) for a second user-selected list of chemical compounds, wherein objects representative of the second user-selected chemical compounds are displayed in a second window.

7. (Currently Amended) The method according to claim 3, wherein step (3) further comprises receiving user input relating to one or more of the following:

(viii)[[iv]]) dragging one or more objects from the first window to a second window of the display screen; and

(ix)[[v]]) dragging one or more objects to the first window from the second window.

8. (Currently Amended) The method according to claim 3, wherein step (3) further comprises receiving user input relating to one or more of the following:

(viii)[[iv]]) selecting one or more of the objects; and

(ix[(v)]) selecting one or more types of information related to the associated chemical compounds to be displayed.

9. (Previously presented) The method according to claim 8, wherein the one or more types of information include one or more selected from: chemical compound information; active site docker information; and nuclear magnetic resonance information.

10. (Currently Amended) The method according to claim 3, wherein step (3) further comprises receiving user input relating to one or more of the following:

(viii[(iv)]) selecting one or more areas of the window; and

(ix[(v)]) selecting one or more types of information related to the associated chemical compounds to be displayed.

11. (Previously presented) The method according to claim 10, wherein the one or more types of information include one or more selected from: chemical compound information; active site docker information; and nuclear magnetic resonance information.

12. (Currently amended) The method according to claim 3, wherein step (3) further comprises receiving user input relating to one or more of the following:

(viii[(iv)]) setting a number of dimensions represented in the window;

(ix[(v)]) manipulating an orientation of the window;

(x[(vi)]) manipulating a zooming function associate with the window; and

(xi[(vii)]) manipulating one or more appearance features of one or more of the objects.

13. (Previously presented) The method according to claim 12, wherein said manipulating an orientation of the window comprises manipulation one or more of rotation, resizing, and translation.

14. (Previously presented) The method according to claim 12, wherein the one or more appearance features comprise one or more selected from: size; shape; color; intensity of color; degree of visibility; degree of transparency; and degree of shininess.

15. (Previously presented) The method according to claim 14, wherein the one or more appearance features represent one or more of the following: a physical feature of the corresponding chemical compound; a chemical feature of the corresponding chemical compound; a biological feature of the corresponding chemical compound; a cost of the corresponding chemical compound; a difficulty of synthesizing of the corresponding chemical compound; and an availability of the corresponding compound.

16. (Previously presented) The method according to claim 3, wherein step (3) further comprises receiving user input relating to one or more of the following:

- (a) changing positions of one or more of the objects; and
- (b) changing relationships between two or more of the objects.

17. (Previously presented) The method according to claim 3, further comprising displaying multiple sets of objects on the window, wherein step (3) further comprises receiving user input commanding the computer system to toggle between the multiple sets of objects.

18. (Previously presented) The method according to claim 3, wherein step (1) comprises allowing the user to drag a set of one or more selected compounds from a second window into the first window.

19. (Previously presented) The method according to claim 3, wherein step (1) comprises allowing the user to select the list of chemical compounds from a structure browser window.
20. (Previously presented) The method according to claim 3, wherein step (1) comprises allowing the user to type the list of chemical compounds.
21. (Previously presented) The method according to claim 3, wherein step (1) comprises allowing the user to select building blocks, wherein the computer system generates a combinatorial library of chemical compounds from the user-selected building blocks.
22. (Previously presented) The method according to claim 3, further comprising:
  - (4) Displaying a structure browse window, said structure browser window including a plurality user-selectable tabbed pages, each said user-selectable tabbed page associated with a set of chemical compounds or a library, wherein each said library tab is associated with a second set of tabbed pages corresponding to building blocks associated with the corresponding library, wherein the user can select one or more chemical compounds and/or de-select one or more chemical compounds and/or one or more building blocks for display in the window.
23. (Currently Amended) A computer program product comprising a computer useable medium having computer program logic stored therein, said computer program logic enabling a computer system to graphically interface with one or more users to interactively display information related to chemical compounds, wherein said computer program logic comprises:
  - (a) a compound selection function that enables the computer system to receive a user-selected list of chemical compounds;

- (b) a displaying function that enables the computer system to display objects representative of the user-selected chemical compounds in a window of a display screen, wherein distances between the objects represent dissimilarity between the corresponding chemical compounds; and
- (c) a user-input function that enables the computer system to receive user input relating to one or more of the following:
  - (i) deleting one or more of the objects from the window;
  - (ii) adding one or more additional objects to the window; and
  - (iii) displaying chemical compound information associated with one or more of the objects;
  - (iv) selecting between having the computer system evaluate the dissimilarities or retrieve dissimilarity values from a source;
  - (v) selecting one or more dissimilarity evaluation techniques;
  - (vi) selecting one or more properties to be evaluated as part of a dissimilarity evaluation;
  - (vii) selecting a scaling factor for one or more of the properties.